

CLAIMS

1. A closet flange for coupling the base of a toilet to a drain pipe, comprising:
 - 2 a main generally cylindrical body portion dimensioned for connection to the upper end of a drain pipe and having a through bore for communicating with the interior of the drain pipe;
 - 4 an attachment flange portion extending radially outward from an upper end of the cylindrical body portion and configured for connecting to the base of a toilet;
 - 6 a knockout temporarily sealing the through bore and removable by breaking away a peripheral edge of the knockout; and
 - 8 a retainer extending radially inward from an inner wall of the cylindrical portion below the knockout and configured to prevent the knockout from falling down the through bore when broken
 - 10 away.
2. The closet flange of Claim 1 wherein the cylindrical body portion is made of plastic and is dimensioned for solvent welding around the outside of a standard smaller size diameter plastic drain pipe, or within the inside of a standard larger size diameter plastic drain pipe.
3. The closet flange of Claim 1 wherein the attachment flange portion has an annular shape.
4. The closet flange of Claim 1 wherein the retainer is an annular lip.
5. The closet flange of Claim 1 wherein the knockout is formed with a raised ring configured for gripping with pliers to facilitate breaking away the knockout.
6. The closet flange of Claim 1 wherein the peripheral edge of the knockout is integrally formed with a junction of the cylindrical body portion and the attachment flange portion.

7. The closet flange of Claim 1 wherein the attachment flange portion is formed with a
2 pair of semi-circular diametrically opposed key-shaped slots.

8. The closet flange of Claim 1 wherein the inner wall of the cylindrical body portion is
2 tapered.

9. The closet flange of Claim 1 wherein the knockout is recessed from an upper surface
2 of the attachment flange portion.

10. The closet flange of Claim 1 wherein the knockout is formed with a pattern of
2 reinforcing ribs.

11. A closet flange, comprising:

2 a plastic cylindrical body portion dimensioned for solvent welding around the outside of a
standard smaller size diameter plastic drain pipe, or within the inside of a standard larger size
4 diameter plastic drain pipe, and having a through bore for communicating with the interior of the
drain pipe;

6 a plastic attachment flange portion extending radially outward from an upper end of the
cylindrical body portion and configured for connecting to the base of a toilet;

8 a plastic knockout temporarily sealing the through bore and removable by breaking away a
peripheral edge of the knockout; and

10 a plastic retainer extending radially inward from an inner wall of the cylindrical portion below
the knockout and configured to prevent the knockout from falling down the through bore when
12 broken away.

12. The closet flange of Claim 11 wherein the attachment flange portion has an annular
2 shape.

13. The closet flange of Claim 11 wherein the retainer is an annular lip.

14. The closet flange of Claim 11 wherein the knockout is formed with a raised ring
2 configured for gripping with pliers to facilitate breaking away the knockout.

15. The closet flange of Claim 11 wherein the peripheral edge of the knockout is integrally
2 formed with a junction of the cylindrical body portion and the attachment flange portion.

16. The closet flange of Claim 11 wherein the attachment flange portion is formed with a
2 pair of semi-circular diametrically opposed key-shaped slots.

17. The closet flange of Claim 11 wherein the inner wall of the cylindrical body portion
2 is tapered.

18. The closet flange of Claim 11 wherein the knockout is recessed from an upper surface
2 of the attachment flange portion.

19. The closet flange of Claim 11 wherein the knockout is formed with a pattern of
2 reinforcing ribs.

20. A closet flange for coupling the base of a toilet to a drain pipe, comprising:
2 a main generally cylindrical body portion dimensioned for connection to the upper end of a
drain pipe and having a through bore for communicating with the interior of the drain pipe;
4 an annular attachment flange portion extending radially outward from an upper end of the
cylindrical body portion and configured for connecting to the base of a toilet, the attachment flange
6 portion being formed with a pair of semi-circular diametrically opposed key-shaped slots;
a knockout temporarily sealing the through bore and having a peripheral edge integrally
8 formed with a junction of the cylindrical body portion and the attachment flange portion, the
knockout having a raised ring configured for gripping with pliers to facilitate breaking the junction
10 to permit removal of the knockout;

a retainer in the form of an annular lip extending radially inward from an inner wall of the
12 cylindrical portion below the knockout and configured to prevent the knockout from falling down
the through bore when broken away; and

14 wherein the cylindrical body portion is made of plastic and is dimensioned for solvent welding
around the outside of a standard smaller size diameter plastic drain pipe, or within the inside of a
16 standard larger size diameter plastic drain pipe.